Comparing Social Media and Postal Mailings in Forestry Extension Program Marketing

Jason Gordon
University of Georgia, jason.gordon@uga.edu

Marc Measells
Mississippi State University, mkm2@msstate.edu

John Willis
U.S. Forest Service

Brady Self
Mississippi State University, brady.self@msstate.edu

Comparing Social Media and Postal Mailings in Forestry Extension Program Marketing

Acknowledgments

Comparing Social Media and Postal Mailings in Forestry Extension Program Marketing

Jason Gordon
University of Georgia

Marc Measells
Mississippi State University

John Willis
U.S. Forest Service

Brady Self
Mississippi State University

This report describes a project that tested social media versus traditional postal mailing advertising for a series of forestry Extension educational programs. Forestry Extension clientele have diverse backgrounds and include landowners, urban tree owners, communities, agencies, and others, and vary widely by sociodemographic and ownership characteristics. Such diversity creates challenges for technology transfer, including initial client contact, participation in educational programming, and realization of learning objectives. The Mississippi State University Forestry Extension program has attempted to address these challenges through social media marketing and in-person impact evaluation. An online marketing strategy resulted in 39% of clients becoming aware of and registering for programs through social media and email compared with 45% from postal mailings. Still, social media marketing resulted in more clients registering earlier, and in registration of clients who had not previously attended Extension programming, compared with postal marketing. Given the many diverse communication methods used by Extension clientele, social media, and traditional forms of marketing should be integrated into successful marketing campaigns. Implications for future educational efforts are discussed.

Keywords: social media, advertising, forestry, marketing, advertising, Facebook

Introduction

This Brief Report addresses a social media program marketing strategy developed in response to the need for multiple methods of contacting diverse clientele. Extension educators understand the importance of social media. Social media benefits in Extension were described by Gharis, Bardon, Evans, Hubbard, and Taylor (2014), but perhaps most importantly, social media leads to

Direct correspondence to Jason Gordon at Jason.Gordon@uga.edu

visibility, connectedness, and ability to reach diverse new clientele. Despite its growing popularity, many Extension professionals are not fully employing social media in educational efforts (Newbury, Humphreys, & Fuess, 2014). Extension professionals have cited concerns about time management, control of privacy, and lack of knowledge about how to most effectively post information and develop targeted marketing (Newbury et al., 2014).

In the case of Mississippi State University Forestry Extension, social media use was limited to sporadic blog postings coupled with Facebook postings via WordPress. Twitter was a separate activity and employed only occasionally. In all cases, postings consisted of programmatic announcements – social media platforms were not used in technology transfer. Besides this narrow use of social media, Mississippi State University Forestry Extension has distributed event marketing material using a mail list developed from county tax rolls, which has been the primary marketing strategy for over twenty years (Londo, Kushla, & Smallidge, 2008). While costs vary based on bulk printing and material rates, a typical mailout to market a single program would cost between $2,000 and $4,000 with a return of thirty (or less) to fifty participants attending the program. Many of these participants were regular clients as members of county forest landowner associations and would have become aware of the program through county Extension agent email lists regardless of a specific mailout.

With increasingly limited resources and a desire to have more impact on a demographically diverse clientele group, Extension programs cannot afford inefficient use of funds or time on ineffective marketing. In this study, we compared the effectiveness of social media vs. paper mailing approaches to advertise an "Introduction to Forest Management" educational series held at several county Extension offices in the state and conducted by state Extension specialists.

Methods

Approach

An external grant funded this educational series and its marketing; however, we acknowledge that funding for social media advertising using the methods described here is not always available. The educational programs were held in three Mississippi cities during summer 2018. Meeting advertising consisted of using Facebook, email, and mailed letters via the U.S. Postal Service. Because we wanted to optimize effectiveness and compare marketing approaches, we contracted a marketing firm to design an event Facebook page and a Facebook business page as well as to manage the marketing activities. Both business and event Facebook pages were developed to encourage high rankings (i.e., viewer contact) for the advertising reach (i.e., the total audience). Advertising began three weeks prior to the workshop. Facebook advertising consisted of purchasing 100,000 impressions (i.e., views of the popup ads that appear in a feed) based on the users' profiles, which consisted of web browser cookies and sociodemographic characteristics. Impact of the advertising was measured using Facebook's Insights tool by monitoring the frequency of shares, reach, likes, and follows, which all lead to clicks to the event

page. The most important statistical measure is the click; everything is geared toward making the click happen because it can lead viewers to the program's Facebook page and registration. Reach is also important as it is the number of unique people who saw the content and affects every other tracking metric.

Advertising targeted a broad spectrum of middle-class forest landowners, defined by project personnel as over 30 years of age and earning between $50,000 to $200,000 household incomes, although advertising was not limited only to those Facebook users. Popups, or single image ads, were retargeted (i.e., linked to users' frequently visited websites, including email accounts) within a 60-mile radius of the program sites (a larger radius required greater investment). Costs paid to Facebook increase with retargeting, but a reasonable estimate is $2,500 to $4,000, including impressions. Single image ads included a simple single image with a headline, one to two sentences (known as "copy" in the advertising world), and a link to the program's Facebook page. Such ads are appropriate for most marketing objectives (Hochman, 2020). From the program's Facebook page, users could see course information (date, time, fees, and agenda). The page also contained a link to an Eventbrite registration page.

In addition to the social media marketing, 5,300 landowners per program for the first two programs and 1,500 landowners for the third program (due to budget limitations) received bulk-rate mail marketing materials consisting of an invitation letter and a program agenda. Mailouts cost around $2,500 per program, including returns for incorrect addresses.

Programs occurred from 6:00 to 8:00 in the evening, were free of charge, and included a light snack, an educational presentation, and literature for further information. Workshops addressed basic forestry concepts such as regeneration, thinning, and timber markets. A post-session evaluation of eight questions measured marketing effectiveness. The first question addressed how clients first became aware (AWARE) of the program (Facebook, letter in the mail, word-of-mouth, email, blog/website, other (specify)). Additional questions asked respondents for their best guess as to when (WHEN) they became aware of the program (open-ended), if they shared (SHARE) the announcement (yes/no), and how they prefer (PREFER) to become aware of a program (Facebook, letter, email, other (specify)). A multiple response background question asked for a self-description of client type (TYPE). The respondent could identify as a forest landowner with little prior knowledge, as somewhat knowledgeable, or as very knowledgeable about forestry. The respondent could also identify as a landowner association member or other (and define other). Another question provided four categories (none, 1-5, 6-10, >10) to indicate the frequency (TIMES) with which the client had attended a Forestry Extension meeting in the last five years. Participants also reported race (RACE; white, African American, Other with specification) and age (AGE), an interval scale.

Analysis

All questions were analyzed for frequencies presented in Tables 1 and 2. In addition, crosstabs were used to observe response distributions between variables. Due to inadequate cell counts, responses for some questions were combined to compare distributions using Chi-square. AWARE and PREFER were each combined into three categories (1 = *Facebook*, 2 = *Letter*, 3 = *Other*). TYPE was transformed from five to two categories (1 = *forest landowner with little knowledge and those somewhat knowledgeable*, 2 = *very knowledgeable, landowner association member, and others*). TIMES was transformed from four to two categories (1 = *none*, 2 = *one or more*). RACE was changed from three to two categories (1 = *white*, 2 = *nonwhite*). AGE was recoded into two categories (1 = *under 60*, 2 = *60 and over*).

Results

Facebook Insights

On average, the three programs resulted in 122,854 impressions, 27,458 reach, 842 clicks, 694 unique link clicks (the number of unique people who clicked), 75 shares, 47 comments, and 172 likes. This amounted to just under $1.50 per click to the registration page with a click-through rate of 2.4%. This beats the industry average of $2.14 and 1.16% click-through rate (Hochman, 2020). Attendance was 98, 69, and 68 for each program.

Evaluation

A total of 163 (69%) post-session evaluations were completed. Overall, attendees indicated they first became aware of the meeting through Facebook (35%), letter (45%), friend (13%), email (4%), or other ways (3%) (see Table 1). Based on evaluation respondents alone, postal mailing advertising cost $102 per person, while social media cost about $.03 per person. Two-thirds of participants (66%) shared the announcement with others. Landowners indicated they preferred to receive meeting announcements via letter (41%), email (38%), Facebook (18%), or other ways (2%). The majority (89%) classified themselves as having little knowledge or being somewhat knowledgeable about forest management. During the last five years, 71% had not attended a Forestry Extension meeting, while 24% had attended one to five meetings. Attendees tended to be over 40 years old (median = 61 years) and self-identified as White/Caucasian (81%).

Table 1 demonstrates an almost even split between those who first became aware of the program via Facebook or letter and sharing the information ($p < 0.05$). More respondents with little knowledge about forest management became aware of these meetings through Facebook advertising (38%), compared to the mailed letter (33%). In contrast, those who were somewhat or very knowledgeable were first aware via the mailed letter. When cells were combined for statistical comparison, there was no significant difference between those with little or somewhat little knowledge versus those with much knowledge and how they became aware of the program.

Table 1. Awareness of Meetings

Question	Response	First Aware*			
		Facebook	Letter	Other	Total
SHARE	Yes	43	48	16	107
	No	14	25	17	56
	Total	57	73	33	163
TYPE*	Little Knowledge	38	33	17	88
	Somewhat Knowledgeable	14	30	12	56
	Very Knowledgeable	0	6	0	6
	CFA Member	1	2	0	3
	Other	4	1	3	8
	Total	57	72	32	161
TIMES	None	52	36	27	115
	1 to 5 meetings	5	29	5	39
	6 to 10 meetings	0	5	0	5
	10+ meetings	0	3	1	4
	Total	57	73	33	163
RACE	White/Caucasian	41	65	26	132
	African American	11	8	5	24
	Other	2	0	0	2
	Total	54	73	31	158
AGE	Under 40	2	2	2	6
	40-49	13	3	10	26
	50-59	19	13	8	40
	60-69	20	27	8	55
	70+	3	28	3	34
	Total	57	73	31	161

*Totals vary because participants did not always respond to each question or provided multiple responses to the same question.

Individuals not attending a meeting in the last five years more often learned about these meetings using Facebook (52%) versus letter (36%). There was a significant difference ($p < 0.05$) when participants who had not attended were compared with those who had attended at least once. Although we did not reach as many minority clients as desired, 11 of the 24 participating African American participants indicated they first became aware of the meetings via Facebook. When race was combined into white and nonwhite categories, there was no statistical difference in awareness. As expected, the majority of respondents over age 70 became aware of the meetings through the mailed letter, those aged 60 to 69 were split fairly equally between Facebook and the letter, and the younger age classes tended to become aware via Facebook. When AGE was combined into two categories, a highly significant ($p < 0.05$) difference emerged between participants under 60 and those 60 and over based on how they became aware of the program.

Table 2 depicts respondents' communication preferences. Those who shared information about the program tended to prefer the letter announcement, but there was no significant difference in the distributions of the PREFER categories. Landowners with little forest management knowledge preferred to receive announcements through email (62%), letter (38%), and Facebook (28%). When TYPE of landowner categories was combined, there was no significant difference between those who had little knowledge or were somewhat knowledgeable versus their counterparts. Similarly, individuals that had not attended a meeting in the previous five years tended to prefer other forms of announcement (46%), although this was closely followed by letter (42%). When categories were combined, there was a significant ($p < 0.05$) difference between preferences of those who had attended versus had not attended a program.

Table 2. Contact Preference

Question	Response	Preference*			
		Facebook	Letter	Other	Total
SHARE	Yes	20	49	38	107
	No	10	18	27	55
	Total	30	67	65	162
TYPE	Little Knowledge	20	29	39	88
	Somewhat Knowledgeable	8	28	19	55
	Very Knowledgeable	0	5	1	6
	CFA Member	0	1	2	3
	Other	2	2	4	8
	Total	30	65	65	160
TIMES	None	28	41	46	115
	1 to 5 meetings	2	19	17	38
	6 to 10 meetings	0	3	2	5
	10+ meetings	0	4	0	4
	Total	30	67	65	162
RACE	White/Caucasian	20	61	50	131
	African American	7	6	11	24
	Other	0	0	2	2
	Total	27	67	63	157
AGE	Under 40	3	1	2	6
	40-49	6	7	13	26
	50-59	11	13	16	40
	60-69	8	23	24	55
	70+	2	21	10	33
	Total	30	65	65	160

*Totals vary because participants did not always respond to each question or provided multiple responses to the same question.

The distribution of announcement preference was slightly more balanced for non-whites than whites. However, there was no significant difference between preferences of the two groups. As expected, older participants preferred mailed letters. Younger age groups, however, preferred other announcement formats (e.g., email). There was a significant ($p < 0.05$) difference between participants under 60 and their counterparts 60 and over.

Discussion and Implications

Social media marketing – in addition to social media educational platforms – is important for creating awareness about Extension activities and the value of Extension. In Mississippi, a largely rural state, social media enabled us to reach a new audience, including younger clients who typically do not attend forestry meetings and clients not linked to traditional forestry communication networks. Social media may have an even greater impact in more urbanized states due to a larger concentration of population and broader social networks than typically found in rural communities. We also found that email continues to be a vital communication tool, highlighting the importance of developing and updating client email lists. Because it is free, email is probably the most cost-effective means of communicating (in two directions) regularly with clients.

We were surprised that Facebook did not have a greater impact overall than other methods given the prevalence of Facebook usage and the reach of the marketing as reported through Facebook Insights. However, Facebook Insight metrics demonstrate that advertising introduced potential clients to Extension even if they did not participate in a program. In turn, this exposure may pay dividends down the road. In addition, results suggest that once clients become aware of Forestry Extension through Facebook, communication of upcoming programs through email was preferred over Facebook. While we can only speculate on an underlying cause for this shift, we suspect this pattern may have been driven by a reluctance of individuals to rely on Facebook as a reliable medium for communication. The traditional postal mailing continued to be important for announcing Extension programs (particularly among those with some forestry knowledge, who were probably repeat clients); however, our results demonstrate that postal mailings must be employed in conjunction with other methods. In short, through the combination of methods, audiences were diversified compared to historic participation, which, like many forestry outreach programs, tended to consist of Caucasian males over 50 years old. Benefits of letter communication must be weighed against the investment in postage and printing.

One extenuating circumstance we were unable to control was that for one program, the county Extension agent distributed postcards separate from the mailings distributed by the program leaders. This probably affected the number of participants aware of the program through a letter (indeed, excluding this county from the analysis results in a majority becoming aware through Facebook). They may also prefer to receive a personalized mailing from their county agent as opposed to a bulk postal mailing from Forestry Extension (i.e., campus mailouts). A second

limitation of our assessment was not using Twitter, Instagram, and LinkedIn. We chose to focus on the reported methods because they reach a broad, diverse audience, and due to budgetary constraints of the grant.

The methods in this report can easily be replicated. After gaining proficiency using the Facebook advertising processes, Extension personnel should be able to manage marketing campaigns without a professional marketing firm (although an added benefit to utilizing a marketing firm is creative design). The key to successful social media marketing is continuous and regular activity. In part, this contributes to branding, which increases clients' familiarity and trust in a product. Even if regular marketing cannot occur, due to time, personnel, and budgetary constraints, such marketing two to three times per year can result in a number of new clients as well as a growing email database, which important for sustaining contact with clients.

References

Gharis, L. W., Bardon, R. E., Evans, J. L., Hubbard, W. G., & Taylor, E. (2014). Expanding the reach of Extension through social media. *Journal of Extension, 52*(3), Article 3FEA3. Retrieved from https://www.joe.org/joe/2014june/a3.php

Hochman, J. (2020). *The cost of pay per click advertising—trends and analysis.* Retrieved from https://www.hochmanconsultants.com/cost-of-ppc-advertising

Londo, A. J., Kushla, J. D., & Smallidge, P. (2008). Use of county tax rolls for the creation of mailing lists for Extension programming. *Journal of Extension, 46*(6), Article 6FEA6. Retrieved from https://joe.org/joe/2008december/a6.php

Newbury, E., Humphreys, L., & Fuess, L. (2014). Over the hurdles: Barriers to social media use in Extension offices. *Journal of Extension, 52*(5), Article 5FEA1. Retrieved from https://joe.org/joe/2014october/a1.php

Jason Gordon is an assistant professor in the University of Georgia Warnell School of Forestry & Natural Resources. He focuses on community forestry and arboriculture.

Marc Measells is an Extension associate in the Forestry Department at Mississippi State University. He focuses on landowner education and evaluation.

John Willis is a research forester with the U.S. Forest Service. His focus is silviculture and forest health.

Brady Self is an associate professor in the Forestry Department at Mississippi State University. His focus is silviculture and forest herbicides.

Acknowledgment